1. A motion encoder for determining rotational movement of a rotatable member comprising

An element providing areas having respectively different characteristics for the onward transmission of electromagnetic radiation, the areas being arranged to provide a directionally unique sequence of transmission characteristics along a path traced on rotation of the rotatable element.

2. A motion encoder according to claim 1 further comprising a source of electromagnetic radiation and a detector for sensing the onward transmission of the electromagnetic radiation.

3. A motion encoder according to claim 1 wherein the detector is located for rotation with the rotatable member.

4. A motion encoder according to claim 1 wherein the source is located for rotation with the rotatable member

5. A motion encoder according to claim 1 wherein the characteristics are reflection characteristics.

6. A motion encoder according to claim 1 wherein there are areas having three different characteristics that are repeated in the same order on the surface along the path of the trace.

7. A motion encoder according to claim 1 wherein the rotatable member allows movement in an axis perpendicular to the plane of the rotatable member.